

PRESENTATIONS OF THE PREVIOUS WORKSHOPS

pro flex 2010

Advanced plasma technology for large area PECVD processes on flexible substrates

J. Landrock, Roth & Rau MicroSystems GmbH

Dynamic VHF-PECVD deposition concept tool with linear plasma sources for flexible substrate coating

C. Strobel, TU Dresden

PVD / PECVD web processing solutions

S. Kreher, FHR Anlagenbau GmbH

Recent developments in fast and fine temperature measurement

U. Krause, Advanced Energy Industries GmbH

Roll-to-roll ALD for coating of polymer webs

M. Söderlund, Beneq Oy

Advanced oxygen plasma polymer substrate pre-treatment and coating for flexible electronics applications

M. Audronis, GENCOA Ltd.

Effects of oxygen plasma surface treatment on BOPP film

St.-F. Dribinskiy, Fraunhofer IVV

Moisture Barrier on Plastic substrates by Atomic Layer Deposition (ALD) and Sputtering

A. Smith, CPI-PETEC

Large scale flexible electrochromic devices: towards to roll to roll processing

E. Avendano, ChromoGenics AB

Production Proven Vacuum Web Coating System for Robust and Environmentally-Friendly Transparent Barriers

R. Ludwig, Applied Materials GmbH & Co. KG

Nanoparticulate Barrier Films and Encapsulation method for Solar and Display Applications

S. Ramadas, TERA-BARRIER FILMS PTE. LTD.

ITO for Flexible Electronics Applications

S. Louch, CPI-PETEC

The development of transparent conductive films of organic-inorganic lamination type

N. Tatami, TOYOBO Co., Ltd.

Demands on barrier for organic PV on flexible substrates

U. Bewersdorff-Sarlette, heliatek GmbH

Characterization of ultra-barrier films

Ch. Boeffel, Fraunhofer IAP

Photovoltaic and OLED applications: optical in-situ and in-line metrology for advanced roll-to-roll thin-film processes

Th. Riedle, LayTec GmbH

Magneto-optical Studies of Magnetic Clusters and Thin Films on PET Substrates

K. Schmidegg, Hueck Folien GmbH

Imaging technologies for reliability assessment in flexible photovoltaics

Th. Swonke, Bayerisches Zentrum für Angewandte Energieforschung (ZAE Bayern)

Insulating layers on flexible metallic substrates

F. Händel, Fraunhofer FEP

Permeation testing for organic electronics: review of needs and technological options

G. Nisato, CSEM Centre Suisse d'Electronique

System Integration Technologies on Polymer Substrates

K. Bock, Fraunhofer EMFT

Laser scribing of organic solar cells

R. Neubert, 3D-Micromac AG

R2R Production Solutions for Touch Panels, Flex PV and other Flex Electronic Applications

R. Kukla, Applied Materials GmbH & Co. KG

OLED for Lighting – R2R Fabrication and Inspection

St. Mogck, Fraunhofer IPMS

Low E coatings on flexible substrate for IGU applications

R. Kleinhempel, Southwall Europe GmbH

Recent developments in Silicon based solar cells deposited on plastic film

Y. Ziegler, VHF Technologies SA

Silicon-Light: a new EU project on roll-to-roll fabrication of thin film silicon solar cells on foil

W. Soppe, Energy research Centre (ECN)

Rigid and Flexible Solar Modules from a CIGS Roll-To-Roll Pilot Line

A. Braun, Solarion AG

Manufacturing and applications of Cu(In,Ga)Se₂ solar cells on flexible substrates

D. Brémaud, FLISOM Ltd.

Magnetron based PECVD: an innovative high-speed process

M. Fahland, Fraunhofer FEP

PRESENTATIONS OF THE PREVIOUS WORKSHOPS

pro flex 2007

Control of a sheet resistance and light transmission in TCO production

V. Kozlov, E. Machevsky; Sidrabe Inc., Latvia

About the manufacturing of EMI-NIR locking filter based on Ag & ITO multi-layer coatings on flexible substrate for plasma display panel application

A. Wahl, R. Thielsch, T. Boehme; Southwall Europe GmbH, Germany

Study of influence of under layer on Indium Tin Oxide crystallization

H. Murakami, T. Oya, S. Matsuda, K. Ito; Toyobo Co., Japan

2D Web coating simulator software

I. Tartakovsky; 4S Scientific Ltd, Israel

Recent developments in plasma generation for web coating applications

T. Linz, U. Krause, M. Lutz; Advanced Energy Industries GmbH, Germany

Roll-to-roll surface modification of fluoropolymers

M. Danziger, W. Voitus; IST - Ionen Strahl Technologie - GmbH, Germany

Plasma surface treatment

B. N. Gupta; Polyplex Corporation Ltd., Noida, India

Precise power for flexible substrate coating

D. Ochs; HUETTINGER Elektronik GmbH + Co KG, Germany

Wet coating - opportunity for ultrathin layers

W. Schubert; Universal-Beschichtung GmbH, Germany

Flexible printing of transparent conducting oxides for display applications

J. Puetz; Leibniz-Institut für Neue Materialien, Germany

Roll to roll sputtering for flexible electronic applications

R. Kukla; Applied Materials GmbH & Co. KG, Germany

Laser machining of thin films on top of flexible substrate carriers

J. Hänel, B. Keiper; 3D-Micromac AG, Germany

Permeation Barrier Properties of Oxide Layers on Polymer Film Deposited by Pulsed Magnetron Sputtering

J. Fahlteich, M. Fahland, N. Schiller, W. Schönberger; Fraunhofer Institute for Electron Beam and Plasma Technology, Germany

Specialty films for organic solar cells

J. Hauch; Konarka Technologies GmbH, Germany

Flexible Silicon based solar cells: challenges and chances

R. Schlatman; Helianthos b.v., The Netherlands

CIGS thin film solar cells on polymer substrates – the next generation of photovoltaics

K. Otte, A. Braun; Solarion AG, Germany

The European Project FLEXCELLENCE: roll to roll technology for the production of high efficiency low cost thin film solar cells

V. Terrazoni-Daudrix, C. Ballif, F.-J. Haug; Institute of Microtechnology, University of Neuchâtel, Switzerland; D. Fischer, VHF Technologies S.A., Yverdon-les-Bains, Switzerland; W. Soppa, J. Löffler, ECN Solar Energy, The Netherlands; J. Andreu, University of Barcelona (UBA), Spain; M. Fahland, Fraunhofer Institute for Electron Beam and Plasma Technology, Germany; H. Schlemm, Roth&Rau Oberflächentechnik AG (R&R), Germany; M. Topic, University of Ljubljana, Slovenia; S. Geiger, Carl BAASEL Lasertechnik, Rofin (ROF), GmbH & Co. KG, Germany

Production and coating techniques for polymer solar cells

K. Norman, M. Jørgensen, T. D. Nielsen, F. C. Krebs; Riso National Laboratory, Denmark

High efficiency flexible solar cells: challenges and prospects of manufacturing and applications

D. Bremaud, A.N. Tiwari; Thin Film Physics Group, ETH Zurich, Switzerland

Permeation measurements at 0.001 g/m²/day and below for applications in flexible electronics

H. Norenberg; Technolox Ltd., United Kingdom

In-line monitoring of ultrathin metallic films on PET substrates with sub-nm resolution

K. Schmidegg, M. Bergsmann; HUECK FOLIEN GmbH, Austria; L. Sun, M. Hohage, P. Zeppenfeld; Institut für Experimentalphysik, Johannes Kepler Universität, Austria

Roll-to-roll fabrication of OLED on metal foils for lighting applications

C. May, Fraunhofer-Institut für Photonische Mikrosysteme, Germany; T. Canzler, Novaled AG, Germany; C. Deus, Von Ardenne Anlagentechnik GmbH, Germany; K. Leo, Technische Universität Dresden, Institut für angewandte Photophysik, Germany; N. Schiller, Fraunhofer Institute for Electron Beam and Plasma Technology, Germany; H. Schwab, Philips Licht, UB der Philips GmbH, BU-SSL-OLED, Germany; S. Uredat, Laytec Gesellschaft für in-situ und Nanosensorik mbH, Germany; J. Drechsel, CreaPhys GmbH, Germany

Advanced process control for surface treatment in roll-to-roll and other processes

M. Schulze, AIS Automation Dresden GmbH, Germany

XRF-Inline measuring unit - an important tool to control coating processes

J. Piltz, amtec Analysenmesstechnik GmbH, Germany

On-line plasma monitoring for product optimization

D. Monaghan, V. Bellido-Gonzalez, B. Daniel, S. Counsell; Gencoa Ltd., United Kingdom

In-situ layer thickness measurement by spectral reflectance measurement

S. Uredat, J.-T. Zettler, LayTec GmbH, Germany; M. Eritt, Ch. May, Fraunhofer IPMS, Germany

Development of new linear ion beam source for vacuum web coating

D.-H. Park, W.-K. Choi; Korea Institute of Science and Technology, Korea

High adhesion coatings on polymer films for flexible circuit boards

S. Günther, B. Meyer, W. Schönberger, N. Schiller; Fraunhofer Institute for Electron Beam and Plasma Technology, Germany

PRESENTATIONS OF THE PREVIOUS WORKSHOPS

pro flex 2004

Design Features of Sputter Roll Coaters and Application of Optical Multi Layers on Flexible Substrates

J. Strümpfel, VON ARDENNE Anlagentechnik GmbH

SMARTWEB, A new Vacuum Web Coater with Multiprocess Capabilities

R. Kukla, Applied Films GmbH & Co. KG

Copper-Indium-Gallium-DiSelenide based Thin Film Solar Cells on Polyimide

G. Lippold, A. Braun, Solarion GmbH

ColorSwitch - A New Security Feature Made by Ultra-Thin Coating Technique

M. Bergsmann, Hueck Folien GmbH & Co. KG

Influences on resistance heated boats in web coating

K. Schafsteck, U. Braun, Leybold Optics GmbH

Sputter-coated plastic web for FPD-applications

R. Thielsch, Southwall Europe GmbH

Optical in-situ process monitoring using spectroscopic ellipsometry and Raman scattering

C. Bundesmann, M. Schubert, N. Ashkenov, Universität Leipzig, Institut für Experimentelle Physik II; G. Lippold, Solarion GmbH

Electron Beam Web Coating of Silicon Oxide On Production Scale

W. Lohwasser, Alcan Packaging Services Ltd.

Barrier films for vacuum insulation panels

D. Kaczmarek, S. Jacobsen, Wipak Walsrode GmbH & Co.KG

Ion track technology for the production of polymeric foils with nanostructures and for vacuum surface treatment methods

M. Danziger, IST - Ionen Strahl Technologie - GmbH

Linear Ion Source for In-Line Treatment of Polymers and Glass

T. Linz, D. Shaw, J. Mueller, M. Frati; Advanced Energy Industries GmbH; R. Rank, M. Fahland, Fraunhofer FEP

Production and Applications of flexible printed circuits

L. Ullmann, Fractal AG

Microwave assisted sputtering for polymers

S. Moh, University of Paisley, Thin Film Center

Vacuum Equipment for TCO and AR Coatings – Deposition by Reactive Magnetron Sputtering

V. Kozlov, E.Yadin, E.Machevskis, Sidrabe Inc.

SiO_x Hard Coat Films Deposited at High Rates by a Novel PECVD Roll to Roll Process

J. Madocks, Applied Process Technologies Inc.

Reactive Gas Control of Non Stable Plasmas

D. Monaghan, V. Bellido-González, B. Daniel, J. Counsell, GENCOA Ltd.

Permeation Studies of Gas Barrier Films

B. M. Henry, J. Topping, H. E. Assender, C. R. M. Grovenor, University of Oxford, Department of Materials

EBPVD Roll Coater and Related Technology Issues for Coating on Flexible Materials

Ch. Steuer, VON ARDENNE Anlagentechnik GmbH

Low damage processing of thin films on flexible substrates by ultra-short pulse lasers

K. Zimmer, D. Ruthe, IOM Leibniz-Institut für Oberflächenmodifizierung e. V.; T. Höche, J. Hänel, 3DMM 3D-Micromac AG; A. Braun, Solarion GmbH

Roll-to-roll laser patterning of vacuum coated flexible substrates

D. Meier, LPKF Laser & Electronics AG

In-line Monitoring of coating processes with fiber optical spectrometers - possibilities and limitations

C. P. Renschen, OPTOcon GmbH

Forgery-proof optical codings made by vacuum coating

R. Domnick, identif GmbH

UV Curing: Plain and structured coatings as sub- and superstrate for vacuum web coatings

J. v. Sonntag, IOM

Thickness and element contents of thin films on foils - measured online by X-ray

J. Piltz, Amtec

Coating of polymer films with low resistance transparent electrodes

M. Fahland, Ch. Charton, Fraunhofer FEP